



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,779	07/27/2001	Ronald J. Skrzyniarz	1945.BDM	8792

7590 10/29/2008
Cynthia L. Foulke
NATIONAL STARCH AND CHEMICAL COMPANY
10 Finderne Avenue
Bridgewater, NJ 08807-0500

EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
----------	--------------

1794

MAIL DATE	DELIVERY MODE
-----------	---------------

10/29/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD J. SKRZYNIARZ, and
LISA BROWN

Appeal 2008-4474
Application 09/916,779
Technology Center 1700

Decided: October 29, 2008

Before BRADLEY R. GARRIS, ROMULO H. DELMENDO, and
JEFFREY B. ROBERTSON, *Administrative Patent Judges*.

ROBERTSON, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellants appeal under 35 U.S.C. § 134(a) (2002) from the Examiner's rejection of claims 12-18, 21, and 22.¹ (Examiner's Answer entered December 27, 2007, hereinafter "Ans."). We have jurisdiction pursuant to 35 U.S.C. § 6(b) (2002).

We AFFIRM.

THE INVENTION

Appellants' claimed invention is directed to an article of manufacture including a wood composite and a high pressure laminate. (Spec. 2). The wood composite is bonded to the high pressure laminate through a foamed adhesive comprising at least one polyvinyl acetate emulsion. *Id.* The adhesive may be foamed from about 20 to about 60% by volume. (Original Claim 2). The article of manufacture may be a countertop. (Spec. 2).

Claims 12, 13, and 18, reproduced below, are representative of the subject matter on appeal.

12. An article of manufacture comprising a wood composite and a high pressure laminate, wherein the wood composite is bonded to the high pressure laminate using a foamed adhesive comprising at least one polyvinyl acetate emulsion.

13. The article of claim 12 where the foamed adhesive is foamed from about 20 to about 60% by volume.

18. The article of claim 17 which is a countertop.

THE REJECTIONS

¹ Claims 1-11, 19, and 20 have been canceled. (Appeal Brief filed October 30, 2007, hereinafter "Br.," 1).

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Karszes	3,891,788	Jun. 24, 1975
Mafoti	5,804,618	Sep. 8, 1998

There are three grounds of rejection currently before us on appeal: (1) claims 12-14 and 21 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) as obvious over Karszes; (2) claims 12-17, 21, and 22 stand rejected under 35 U.S.C. § 102(b) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) (2002) as obvious over Mafoti; and (3) claim 18 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Karszes in view of Mafoti.

The Examiner found that both Karszes and Mafoti teach wood composites bonded to high pressure laminae through polyvinyl acetate emulsion adhesives. (Ans. 3-5). The Examiner found that there is no credible evidence on the record that the use of a foamed adhesive produces a structural difference in the claimed articles over the articles of Karszes and Mafoti. (Ans. 3 and 5).

Appellants contend that the presently claimed articles are patentably distinct over the articles of Karszes and Mafoti because the presently claimed articles are less wet, have less adhesive residue, and contain air voids throughout the dried adhesive. (Br. 5-8).

ISSUE

Based on the contentions of Appellants and the Examiner, we frame the issue before us on appeal as: Have Appellants shown that the Examiner

erred in finding that the structure of the claimed article is not patentably distinct from the structure of the articles in the cited prior art of record?

We answer this question in the negative.

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. Appellants' Specification states:

Aqueous liquid adhesives require significant drying times, require long set or cure times, and the water contained within them tends to swell surface and/or core materials. It is known, for example, that countertops prepared with prior art adhesives are prone to warpage. This warpage is generally due to water in the bondline and heat from the oven.
(Spec. 1).

2. Appellants' Specification states:

By foaming, less water is introduced into the construction, the temperature requirements of the top heaters may be decreased, and line speed may be increased.
(Spec. 3).

3. Appellants' Specification states:

By decreasing the amount of water in the bondline, oven temperatures can be decreased, lowering cost and decreasing the potential for warpage of the product.
(Spec. 9).

4. Appellants' Specification states:

Adhesive was fed manually to a coater (commercially available from Black Brothers and from Union Tool). The particle board was coated with approximately 4 to 6 wet mils of adhesive. The HPL [high pressure laminate] was indexed manually onto

the board. The construction next traveled down the conveyor to a heated roller press. Roller presses with a length of from 4 feet to 30 feet, having multiple nippers, usually from 2 to 20 nippers from inlet to outlet, and equipped with both top and bottom heaters are commercially available from Midwest Automation and from Evans. Typically, the nippers will have a variable temperature profile ranging from about 110° to about 160°F for top heat, with maximum temperature in the center. The bottom temperature of the core is typically maintained from between about 160° and 180°F.

(Spec. 8).

5. Appellants' Specification is silent as to the presence of air voids in the adhesive of the finished article.
6. Karszes teaches articles of manufacture including a wood composite bonded to a high pressure laminate using a polyvinylacetate emulsion adhesive. (Col. 1, ll. 4-16; col. 2, ll. 15-27).
7. Mafoti teaches articles of manufacture including a wood composite bonded to a high pressure laminate using polyvinylacetate emulsion adhesives. (Col. 1, l. 66 – col. 2, l. 12; col. 4, ll. 5-12).
8. Mafoti states:

Adhesives of these examples were applied to both sides of four by eight foot sheets of particle board at 4 to 8 grams (wet)/sq. ft. for a coating of adhesive that is about 0.004 to 0.008 inches thick. A four by eight foot sheet of melamine treated paper is placed on each of the adhesive treated surfaces and the resulting panel is moved through a heating zone. Residence time in the heating zone is about 40 seconds. These panels enter the heating zone at ambient temperature and exit at about 180°-200°. F. Pressure of 30-40 psi is applied through nip rollers as the panel is moved through the heating zone.
(Col. 5, ll. 22-32)

PRINCIPLES OF LAW

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 827 (1987). Analysis of whether a claim is patentable over the prior art under 35 U.S.C. § 102 begins with a determination of the scope of the claim. We “determine[] the scope of the claims in patent applications not solely on the basis of the claim language, but upon giving claims their broadest reasonable construction ‘in light of the Specification as it would be interpreted by one of ordinary skill in the art.’” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1317 (Fed. Cir. 2005), *cert. denied* 126 S. Ct. 1332 (2006) (quoting *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004)). The properly interpreted claim must then be compared with the prior art.

“Section 103 forbids issuance of a patent when ‘the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.’” *KSR Int’l Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1734 (2007).

“[E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior

product was made by a different process.” *In re Thorpe*, 777 F.2d 695, 697, (Fed. Cir. 1985) (Internal citations omitted).

ANALYSIS

Appellants have grouped claim 13 separately from the other claims subject to each of the first two grounds of rejection. However, Appellants rely on similar arguments for each ground of rejection. Accordingly, we confine our discussion to appealed claim 12, which contains the claim limitations representative of the arguments made by Appellants, and address claim 13 only to the extent that Appellants have argued it separately pursuant to 37 C.F.R. § 41.37(c)(1)(vii) (2006).

After careful consideration of both the Examiner’s and Appellants’ contentions, we agree with the Examiner that Appellants have not presented sufficient evidence that producing the claimed articles through use of a foamed adhesive imparts a patentable distinction over the cited prior art of record. (Ans. 5). *In re Marosi*, 710 F.2d 799, 803 (Fed. Cir. 1983) (“[w]here a product-by-process claim is rejected over a prior art product that appears to be identical, although produced by a different process, the burden is upon the applicants to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product.”). In the instant case, both Karszes and Mafoti describe articles of manufacture including a wood composite bonded to a high pressure laminate using polyvinylacetate emulsion adhesives. (FF 6 and 7). Appellants argue that the claimed articles will be less wet when newly made, which minimizes warping. (Br. 5). However, the claims are not limited to “newly made” articles or articles prior to drying. In addition, Appellants’ Specification

states that by decreasing the amount of water, the “potential for warpage” is decreased and that the “potential for warpage” increases as a result of water in the bondline and heat of the oven during the drying process. (FF 1 and 3). Thus, there is no persuasive evidence on the record that the articles of Karszes or Mafoti are necessarily warped such that when dried, the presently claimed articles are structurally different than the prior art articles.

Appellants additionally contend that the claimed foamed adhesive produces an article having less adhesive present than the articles of Karszes or Mafoti. (Br. 4). However, Appellants’ Specification only discusses a reduction in the amount of water used in the process of producing the claimed articles. (FF 2 and 3). Thus, Appellants appear to equate “less adhesive” with the use of less water in the adhesive emulsions. The amount of adhesive emulsion used in the manufacturing process is different than the amount of adhesive residue present in the produced article. Any water present in the adhesive is removed when the articles are dried. (*See* FF 1 and 8). Therefore, the amount of water limits the process by which the articles are made and not the articles produced by the process. Moreover, the present claims are silent as to the amount of adhesive residue in the claimed articles. Additionally, Appellants point to no persuasive evidence on the record that the amount of adhesive residue in the presently claimed articles is any different than the amount of adhesive residue in the articles of Karszes or Mafoti. Regarding claim 13, there is also no persuasive evidence on the record that the degree to which the adhesive is foamed changes the solid content of the adhesive in the resultant articles.

Appellants also argue that the presently claimed articles will contain air voids throughout the dried adhesive, which structurally distinguishes the

presently claimed articles from Karszes and Mafoti. (Br. 4). However, Appellants rely on no evidence, but mere attorney argument to support this contention. *See In re Schulze*, 346 F.2d 600, 602, (CCPA 1965).

Appellants' Specification is silent as to the presence of air voids in the adhesive of the finished article. (Ans. 8; FF 5). Further, in the production of the articles, heated roller presses are used in the bonding process. (FF 4). Appellants have presented no persuasive evidence that air voids would be present in the completed article after the article is subjected to the press rollers, or that the degree to which the adhesive is foamed imparts any particular air void structure to the resulting article. Indeed, Appellants' process supports the Examiner's position that the adhesive collapses during drying. (Ans. 8). Moreover, Appellants have presented no persuasive evidence that the articles of Karszes or Mafoti contain adhesives free of air voids. Therefore, the Examiner's decision to reject the claims as being unpatentable over Karszes or Mafoti is affirmed. The Examiner's decision to reject claim 18 is affirmed for the same reasons.

CONCLUSION

In light of the above discussion, Appellants failed to demonstrate that the Examiner erred in rejecting claims 12-14 and 21 under 35 U.S.C. § 102(b) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) as obvious over Karszes, claims 12-17, 21, and 22 under 35 U.S.C. § 102(b) as being anticipated by or in the alternative, under 35 U.S.C. § 103(a) (2002) as obvious over Mafoti, or claim 18 under 35 U.S.C. § 103(a) as being unpatentable over Karszes in view of Mafoti.

Appeal 2008-4474
Application 09/916,779

ORDER

The Examiner's decision rejecting claims 12-18, 21, and 22 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. §1.136(a)(1)(iv).

AFFIRMED

PL initial:
sld

CYNTHIA L. FOULKE
NATIONAL STRACH AND CHEMICAL COMPANY
10 FINDERNE AVENUE
BRIDGEWATER, NJ 08807-0500